

REMARKS

This request for reconsideration is filed in response to the Office Action dated November 27, 2007. For the following reasons this application should be allowed and the case passed to issue.

Claims 1-8 are pending in this application. Claims 1-8 have been rejected.

Claim Rejections Under 35 U.S.C. § 103

Claims 1 – 8 were rejected under 35 U.S.C. § 103 (a) as unpatentable over Miyazaki et al. (US 6,423,446) in view of Yasui et al. (JP 2001-179151). This rejection is traversed, and reconsideration and withdrawal thereof respectfully requested. The following is a comparison between the present invention, as claimed, and the cited prior art.

An aspect of the invention, per claim 1, is a method for producing lithium ion secondary batteries, comprising the steps of preparing an electrode sheet with lead-forming parts and intermittently forming porous insulating layers comprising an inorganic oxide filler and a binder on a surface of the electrode sheet excluding the lead-forming parts. A lead is connected to each of the lead-forming parts and the batteries are fabricated by using the electrode sheet to which the leads are connected. The step of intermittently forming porous insulating layers comprises a step of applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of the gravure roll onto a surface of the electrode sheet that is being transported by a plurality of guide rolls, excluding the lead-forming parts; and a step of moving at least one selected from the gravure roll and the guide rolls to move the electrode sheet away from the gravure roll at the lead-forming parts.

The Examiner characterized Miyazaki et al. as disclosing a method for producing lithium ion secondary batteries which comprises steps of preparing an electrode sheet with lead-forming

parts, intermittently forming porous insulating layers comprising an inorganic oxide filler and a binder on a surface of the electrode sheet, excluding the lead forming parts, connecting leads to the lead forming parts, and fabricating a battery therefrom, wherein a gravure roll is utilized for forming the porous insulating layer from a slurry of inorganic oxide filler and binder. The Examiner characterized the secondary reference Yasui et al. as disclosing at paragraphs [0036] – [0040] forming porous insulating layers on electrode sheets by means of a gravure process wherein at least one of the gravure and guide rolls is moved away from the sheet at a lead forming part, and postulated that it would have been obvious to modify Miyazaki et al. according to the teaching of Yasui et al. to provide a remarkable and precisely applied uniform coating.

The combination of Miyazaki et al. and Yasui et al. does not suggest the claimed method for producing lithium ion secondary batteries because Miyazaki et al. and Yasui et al., whether taken alone, or in combination, do not suggest intermittently forming porous insulating layers comprising an inorganic oxide filler and a binder on the surface of an electrode sheet by applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of the electrode sheet, and moving at least one selected from the gravure roll and the guide rolls to move the electrode sheet away from the gravure roll at the lead-forming part, as required by claim 1.

Contrary to the Examiner's assertion, Miyazaki et al. do not disclose intermittently forming porous **insulating** layers comprising an inorganic oxide filler and a binder on the surface of an electrode sheet by applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of the electrode sheet, as required by claim 1. Miyazaki et al. disclose applying a slurry of an inorganic oxide **active** material and a binder on a collector. The inorganic oxide **active** material and binder

would not be an insulating layer. Rather, in order for the battery to function, the **active layer must be conductive**.

Contrary to the Examiner's characterization of paragraphs [0036] – [0040] of Yasui et al. as teaching moving at least one of the gravure and guide rolls away from the sheet at a lead forming part, the cited paragraphs, as well as the entire disclosure of Yasui et al., fail to suggest movement of at least one of the gravure and guide rolls away from the sheet at a lead forming part as recited in claim 1. In point of fact, paragraphs [0037] of Yasui et al. teach that "the coating thickness of the coating agent to a base material 10 can be adjusted by changing the velocity of the peripheral velocity of the gravure roll 13 to the travel speed of a base material". Since neither Miyazaki et al. nor Yasui et al. suggest movement of at least one of the gravure and guide rolls away from the sheet at a lead forming part as recited in independent claim 1, any possible combination of the applied references would fail to provide the claimed invention.

If the Examiner maintains this rejection, it is respectfully requested that the Examiner specifically point out where Miyazaki et al. disclose intermittently forming porous **insulating** layers comprising an inorganic oxide filler and a binder on the surface of an electrode sheet by applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of the electrode sheet, and where Yasui et al. disclose moving at least one of the gravure and guide rolls away from the sheet at a lead forming part. Though, the Examiner alleged that paragraphs [0036] – [0040] of Yasui et al. teach moving at least one of the gravure and guide rolls away from the sheet at a lead forming part, it is not apparent where Yasui et al. makes such a disclosure. It is respectfully requested that the Examiner point out the specific text in paragraphs [0036]-[0040] that the Examiner is relying on for this teaching.

Obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge readily available to one of ordinary skill in the art. *In re Kotzab*, 217 F.3d 1365, 1370 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). There is no suggestion in either Miyazaki et al. or Yasui et al. to intermittently form porous insulating layers comprising an inorganic oxide filler and a binder on the surface of an electrode sheet by applying a slurry comprising the inorganic oxide filler and the binder to the outer surface of a gravure roll, and transferring the slurry applied to the outer surface of the electrode sheet, and moving at least one selected from the gravure roll and the guide rolls to move the electrode sheet away from the gravure roll at the lead-forming part, as required by claim 1, as required by claim 1.

The only teaching of the claimed method is found in Applicants' disclosure. However, the teaching or suggestion to make a claimed combination and the reasonable expectation of success must not be based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The dependent claims are allowable for at least the same reasons as independent claim 1 and further distinguish the claimed method for producing lithium ion secondary batteries.

In view of the above remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

Application No.: 10/550,149

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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